

Amendments to the Claims:

1. (currently amended) A method of evaluating the efficacy of a therapeutic or prophylactic treatment of *Chlamydia*-induced disease, comprising the steps of:

- a) rationally selecting ~~a test mouse~~ a particular mouse strain and identifying whether said strain is a low nitric oxide (NO) responder strain or a high NO responder strain;
- b) rationally selecting a dose of *Chlamydia* to be administered to ~~said a~~ test mouse of said strain;
- c) ~~optionally if appropriate~~, rationally selecting a feeding regimen with appropriate levels of arginine and feeding said test mouse according to said regimen;
- d) ~~optionally if appropriate~~, treating said test mouse with ~~a NOS2~~ an inhibitor of nitric oxide synthase-2 (NOS2);
- e) administering *Chlamydia* to said test mouse;
- f) administering said therapeutic or prophylactic treatment to said test mouse; and
- g) assessing the severity of chlamydial disease in said test mouse,

wherein the severity of chlamydial disease in said mouse differs from the severity of chlamydial disease in a reference mouse to which said therapeutic or prophylactic treatment was not administered.

2. (original) The method of claim 1, wherein said treatment is a prophylactic treatment and said step of administering said prophylactic treatment is performed before said step of administering *Chlamydia* to said mouse.

3. (original) The method of claim 1, wherein the step of administering *Chlamydia* to said mouse comprises administering between  $1 \times 10^5$  and  $1 \times 10^6$  IFU of *Chlamydia* to said mouse intranasally.

4. (currently amended) The method of claim 1, wherein the step of rationally selecting a feeding regimen comprises ~~testing said mouse strain for macrophage NO production,~~ determining whether said mouse strain is a high NO responder strain or a low NO responder strain, and selecting a diet low in protein and arginine if said mouse strain is a high NO responder strain.

5. (original) The method of claim 1, wherein said feeding regimen requires feeding said mouse a diet high in arginine following prophylactic treatment.

6. (original) The method of claim 1, wherein said feeding regimen includes a food source having an arginine content between 0.1% and 3.0%.

7. (currently amended) The method of claim 1, wherein said ~~NOS2 inhibitor is AG~~ mouse strain is A/J.

8. (currently amended) The method of claim ~~[[1]]~~ 7, wherein the step of rationally selecting a ~~test mouse comprises identifying a mouse strain which has a high level of NO response and selecting said test mouse from said mouse strain~~ feeding regimen comprises selecting a diet high in protein and arginine.

9. (original) The method of claim 1, wherein the step of rationally selecting a dose of *Chlamydia* to be administered to said test mouse comprises evaluating the mouse strain from which said test mouse is selected to determine the LD<sub>50</sub> for said mouse strain when treated with *Chlamydia psittaci*.